

Application No. 10/699,764

MXIC 1520-1
(P900385US)REMARKS

In the Official Action mailed 03 January 2006, the Examiner reviewed claims 1-32. The Examiner has objected to claim 17 under 37 C.F.R. §1.75(c); has rejected claims 1, 14 and 20 under 35 U.S.C. §102(e); has rejected claims 2-4, and 21-23 under 35 U.S.C. §103(a); has rejected claims 5, 6, 24 and 25 under 35 U.S.C. §103(a); has rejected claims 7, 8, 18, 19, 31 and 32 under 35 U.S.C. §103(a); has rejected claims 9, 15 and 26 under 35 U.S.C. §103(a); has rejected claims 10 and 27 under 35 U.S.C. §103(a); has rejected claims 11-13 and 28-30 under 35 U.S.C. §103(a); and has rejected claim 16 under 35 U.S.C. §103(a).

Applicant has amended claim 1. Claims 1-32 remain pending.

The rejections and objection are respectfully traversed below, and reconsideration is requested.

Objection to Claim 17 under 37 C.F.R. §1.75(c)

The Examiner has objected to claim 17 under 37 C.F.R. §1.75(c) as being of improper dependent form for failing to further limit the subject matter of claim 1, from which it depends. Applicant respectfully requests reconsideration.

Claim 1 recites a “processor ... which fetches and executes instructions.” Such a processor, as described in the specification may comprise dedicated logic circuitry as shown in Fig. 1 and described in paragraph [0030], or may comprise as stated in claim 17, “a configurable logic array configured to execute said instructions” (Fig. 2, paragraph [0032]). Thus, claim 17 recites a species of the more generic claim 1, and therefore “further limits” claim 1.

Accordingly, reconsideration of the objection to claim 17 is respectfully requested.

Rejection of Claims 1, 14 and 20 under 35 U.S.C. §102(e)

The Examiner has rejected claims 1, 14 and 20 under 35 U.S.C. §102(e) as being anticipated by Allegrucci (Pat. No. 6,792,527). Applicant respectfully requests reconsideration in view of the amendment to claim 1.

In particular, Claim 1 requires that the memory store three types of program, including “... instructions for a mission function for the integrated circuit, instructions for a configuration load function used to receive configuration data via said input port, and instructions for a configuration function used to transfer the configuration data to the programmable configuration points within the configurable logic array...”

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Allegrucci on the other hand does not describe the configuration load and the configuration function processes at all, except to show a "Configuration Unit" in Figure 1. There is no text describing the operation of the Configuration Unit in Allegrucci. The fact that the "Configuration Unit" in Allegrucci is illustrated as a block separate from the microprocessor 105 and associated memory 110 in fact suggests that the processor in the Allegrucci system does not execute the "configuration load" and "configuration function" processes. The Examiner cites column 3, lines 28-41 and column 1, line 66 to column 2, line 4 as corresponding to the three types of program recited in claim 1. However, the Examiner is mistaken. The cited passages appear to relate only to mission function programs. Column 3, lines 28-41 describe use of an initialization boot ROM and downloading initialization code and data from external memory. There is no mention of the "configuration load" and "configuration function" processes in this cited passage. Column 1, line 66 to column 2, line 4 describes the microprocessor 105 and its memory 110. There is no description of the "configuration load" and "configuration function" processes in this cited passage. Accordingly, claim 1 is not anticipated by Allegrucci.

Claim 14 depends from claim 1, and is patentable for at least the same reasons.

Claim 20 recites a process of storing the three types of program mentioned above in connection with claim 1, into memory on an integrated circuit including a processor to execute the programs and a configurable logic array. Accordingly, it distinguishes over Allegrucci for basically the same reasons as claim 1.

Accordingly, reconsideration of the rejection of claims 1, 14 and 20 is respectfully requested in view of the amendment.

Rejection of Claims 2-4 and 21-23 under 35 U.S.C. §103(a)

The Examiner has rejected claims 2-4 and 21-23 under 35 U.S.C. §103(a) as being unpatentable over Allegrucci as applied to claims 1 and 20 above, and further in view of Pani et al. (Pat. No. 5,640,344). Claims 2-4 depend from claim 1, and claims 21-23 depend from claim 20, and therefore are patentable for the reasons discussed above and because of the unique combinations recited. Furthermore, Pani describes an implementation of configuration points in a configurable logic array. It does not describe the structure of memory storing executable instructions as do claims 2-4 and 21-23.

Accordingly, reconsideration of the rejection of claims 2-4 and 21-23 is respectfully requested.

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(P900385US)Rejection of Claims 5, 6, 24 and 25 under 35 U.S.C. §103(a)

The Examiner has rejected claims 5, 6, 24 and 25 under 35 U.S.C. §103(a) as being unpatentable over Allegrucci as applied to claims 1 and 20, above, and further in view of Robb et al. (Pat. No. 5,276,839). Claims 5 and 6 depend from claim 1, and claims 24 and 25 depend from claim 20, and therefore are patentable for the reasons discussed above and because of the unique combinations recited.

Accordingly, reconsideration of the rejection of claims 5, 6, 24 and 25 as amended is respectfully requested.

Rejection of Claims 7, 8, 18, 19, 31 and 32 under 35 U.S.C. §103(a)

The Examiner has rejected claims 7, 8, 18, 19, 31 and 32 under 35 U.S.C. §103(a) as being unpatentable over Allegrucci as applied to claims 1 and 20 above, and further in view of Sun et al. (Pat. No. 6,401,221).

Claims 7 and 8 depend from claim 1, and claims 31 and 32 depend from claim 20, and therefore are patentable for the reasons discussed above and because of the unique combinations recited.

Independent claim 18 requires a configuration load function that includes instructions executable by the processor on the chip, and that includes a monitoring process for the configuration load function. Neither Allegrucci, as discussed above, nor Sun et al. describe such a process. Accordingly, the prima facie case is incomplete. Claim 19 depends from claim 18 and is patentable for at least the same reasons.

Accordingly, reconsideration of the rejection of claims 7, 8, 18, 19, 31 and 32 is respectfully requested.

Rejection of Claims 9, 15 and 26 under 35 U.S.C. §103(a)

The Examiner has rejected claims 9, 15 and 26 under 35 U.S.C. §103(a) as being unpatentable over Allegrucci as applied to claims 1 and 20 above, and further in view of Sun et al. (Pat No. 5, 901,330). Claims 9 and 15 depend from claim 1, and claim 26 depends from claim 20, and therefore are patentable for the reasons discussed above and because of the unique combinations recited.

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Accordingly, reconsideration of the rejection of claims 9, 15 and 26 is respectfully requested.

Rejection of Claim 10 and 27 under 35 U.S.C. §103(a)

The Examiner has rejected claims 10 and 27 under 35 U.S.C. §103(a) as being unpatentable over Allegrucci as applied to claims 1 and 20 above, and further in view of Lawman (Pat. No. 6,028,445). Claim 10 depends from claim 1, and claim 27 depends from claim 20, and therefore are patentable for the reasons discussed above and because of the unique combinations recited.

Accordingly, reconsideration of the rejection of claims 10 and 27 is respectfully requested.

Rejection of Claims 11-13 and 28-30 under 35 U.S.C. §103(a)

The Examiner has rejected claims 11-13 and 28-30 under 35 U.S.C. §103(a) as being unpatentable over Allegrucci as applied to claims 1 and 20 above, and further in view of Trimberger (Pat. No. 6,105,105).

Claims 11-13 depend from claim 1, and claims 28-30 depend from claim 20, and therefore are patentable for the reasons discussed above and because of the unique combinations recited.

Accordingly, reconsideration of the rejection of claims 11-13 and 28-30 is respectfully requested.

Rejection of Claim 16 under 35 U.S.C. §103(a)

The Examiner has rejected claim 16 under 35 U.S.C. §103(a) as being unpatentable over Allegrucci as applied to claim 1 above, and further in view of Akao et al. (Pat. No. 5,900,008).

Claim 16 depends from claim 1, and therefore is patentable for the reasons discussed above and because of the unique combination recited.

Accordingly, reconsideration of the rejection of claim 16 is respectfully requested.

Other References

The Examiner stated at the top of page 4 of the Office Action, that "other" prior art in the Office Action could be used as a ground for rejection of claims 1 and 20. In particular, the

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Examiner mentioned the two Sun et al. patents, which are patents that also include Mr. Sun as a co-inventor. Applicant has reviewed the other references in the record and does not believe that they could be applied to render the present claims unpatentable. Accordingly, reconsideration of the statement is requested.

Terminal Disclaimer

Applicant notifies the Examiner that the two related applications identified in the first paragraph of the present application as filed have been rejected for obviousness type double patenting over the present application. Applicant submits herewith terminal disclaimers for the two related applications (Application Nos.: US 10/699,766 and US 10/699,756) which are commonly owned with the instant application. Disclaimers are also being filed in each of these pending "related" applications.

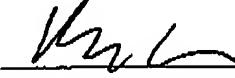
CONCLUSION

It is respectfully submitted that this application is now in condition for allowance, and such action is requested.

The Commissioner is hereby authorized to charge any fee determined to be due in connection with this communication, or credit any overpayment, to our Deposit Account No. 50-0869 (MXIC 1520-1).

Respectfully submitted,

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